Radiation Newsletter

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In accordance with Title VI of the Civil Rights Act of 1964 (42 U.S.C. §1981, 2000d et seq.) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S. C. §794), the Age Discrimination Act of 1975, as amended (42 U.S. C. §6101 et sea.). Title II of the Americans with Disabilities Act of 1990 (42 U.S.C. §12131 et sea.), and Title IX of the Education Amendments of 1972, (34 C.F.R. Parts 100, 104, 106 and 110), the Maine Department of Human Services does not discriminate on the basis of sex, race, color, national origin. disability or age in admission or access to or treatment or employment in its programs and activities.

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These areas must be surveyed to proved they can be

A 'non-impacted area' has no reasonable potential for residual radioactivity. Radiation surveys will not be needed on these areas. Areas that cannot be proven 'non-impacted' will be considered 'impacted' When the power plant submits a License Termina

tion Plan (LTP), it must demonstrate that all areas meet radiological release criteria.

This requires changes to the current Codes of Fed eral Regulations for plants to identify areas and also that they maintain records of property lines changes.

The NRC initially received Maine Yankee atomic Power Plant's License Termination Plan in July 2000. The utilities will submit a revised application in April or June to reflect its abandonment of the proposed use of rubblization of concrete debris and leaving it on site. The NRC expects to complete its review of the revised LTP by January 2002.

Maine Yankee has applied for partial release for Eaton Farm and North Ferry Road, an area that appears to be non-impacted. The changes should not have any great impact on a decommissioning plant.

The bill requires the state to acquire ownership of the planned site prior to commencing facility construction. It also contains several limitations on the acceptance of waste from out of region generators. In addition, it includes language limiting the state's liability for the management and disposal of waste at a site operated by a private entity and outlining the creation and operation of a perpetual care fund.

House Bill No. 3420/ Senate Bill No. 1541

H.B. 3420 and S.B. 1541 are companion bills which provide for the siting of either a low-level radioactive waste assured isolation facility or disposal facility for Texas Compact waste. They contain stringent licensing requirements, license application procedures, and license conditions. They provide for the holding of a county-wide referendum. They also list siting criteria and financial assurance requirements. Once issued, the legislation allows for a 10 year li-

On Monday, May 28, the Texas Legislature adjourned without passing any of the bills.



Radiation Newsletter

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RADIOACTIVE WASTE & MAINE RADIATION DECOMMISSIONING NEWS CONTROL PROGRAM

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Special points of interest:

- · Low Level Radioactive Waste and Materials in Maine
- · Decommissioning of Maine Yankee Atomic Power Plant
- Radioactive Waste Management
- · High Level Radioactive Waste

NEXT MEETING OF THE ACORWD has not been set. Check the Website or call for a late summer/fall meeting date.

Radiation Control Program

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Barging Out the Reactor Vessel

At Maine Yankee the special container that the reactor pressure vessel will be packed in arrived on 3/27. This specialized container was constructed at a metal fabrication facility in Hingham, MA. Maine Yankee began the actual demolition of the Turbine building in April 2001. The expected date for the shipment of the reactor vessel is sometime after November of this year, but possibly not until next spring when the water level in the Savannah River is expected to be higher due to spring runoff. The Southeast has been experiencing a few consecutive years of drought conditions that are expected to mit igate this summer.

The total package to be shipped will consist of the Reactor Pressure vessel (less closure head), Vessel Insulation (cylinder wall only), Reactor Pressure Vessel internals (potions of the thermal shield, core barrel, upper and lower internals), Internal and annular grout, Container, container cover, and shield plates. The Reactor Pressure Vessel Package consists of the contents and the packaging (i.e., the Industrial Package container and the

grouting)
The total activity of the Reactor Pressure
Vessel is <50,000 curies and the major nadionuclides are activated metals: Fe55, Co60 and Ni63. All radioactive components included in the package are class C or less in accordance with 10CFR61 (Code of Federal Regulations). The package meets the DOT shipping criteria of <200mR/hr on contact and <10mR/hr at 2 meters distance.

The reactor pressure vessel package will be transported from the site lay-down area to the barge at a Meine Ventage barge slip.

the barge at a Maine Yankee barge slip. There will be no transport over public roads in Maine.

The package will be secured onto the barge with tie-downs that will meet ANSI N14.24 requirements (American National Standards Institute). All barge loading calculations will be independently reviewed by a qualified Marine architect.

The planned water transit route starts at the plant's barge slip and ends at the department of Energy's Savannah river site. The total distance traveled is about 1,200 miles. The entire transit is expected to take 12 to 14 days. The reactor pressure vessel will be offloaded from Lockwood's barge by Lockwood and Mammoet Heavy transporters at the Savannah River Site's barge ramp. Mammoet will transport the reactor pressure



vessel package 26 miles from the Savannah River site's barge ramp to Barnwell's burial facility over all but 1/2 mile of Department of energy owned roads. Lockwood will offload the reactor pressure vessel package from Mammoet's transporter and place it in it's burial site at Barnwell, South Carolina.

The package will be ready to ship by October 2001. The key to shipping the barge out is the level of water in the Sayannah River. The south has been in a drought recently and the river level is low. The level must n-crease in order for the barge to travel the river. Maine Yankee is in contact with the U.S. Army Corps of Engineers to monitor the river's level. The best window to barge out the package is over the winter of 2001 to 2002. If the river level is not high enough then the package will need to remain at the plant until the next window of high-water. A new contract allows a window hrough

Mammoet moving a steam generator at Indian Point.



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Commission Members

Chair, Sen. Sharon Treat

Vice Chair, Rep. Robert Daigle

Rep. Robert L. Rines

Rep. William R. Savage

Sen. Norman Ferguson Jr

Sen. Tom Sawyer

Robert Demkowicz, DEP

Clough Toppan, PE, DHS

Dr. Robert Marvinney, State Geologist

Mike Meisner, Maine Yankee

Dr.Joeseph Blinick, Licensee

Ron Ouelette, Public

Richard Carev. Public

Stephen Jarrett, Public

Jim Mitchell, Public

W. Donald Hudson, PhD, Chewonki Foundation

All meetings of the Advisory Commission are open to the public. The commission meets 4-6 times a year to discuss LLW and decommissioning issues. Meeting dates can be found at our website or call Tom Hillman at 207-287-8401 for the next meeting time or to be placed on the meeting notification list.

RADIOACTIVE MATERIALS RESPONSE

On Tuesday, April 24, a box of medical waste was returned to a Maine hospital. The shipment was returned from a medical waste company in Massachusetts after the box set off their radiation monitoring alarm. The survey, analysis and investigation determined the source of the radioactivity was an IV hepta-loc (iv needle and tubing) that had a nuclear medicine isotope (Gallium 67) injected through it. After the injection the IV was removed and the patient discharged and the IV set-up was disposed as regular medical waste. Upon discovery the contaminated IV set was placed in the hospitals radioactive waste stor-

age.
On Wednesday, April 25, a
Maine landfill reported finding two empty cases that
had radioactive material
shipping labels attached.
The question was, where are

the nuclear gauges that were in the cases? Surveys of the boxes revealed no radioactive contamination. A survey of licensed gauge holders in Maine was made to see if any gauges were missing or might have been stolen, none were. After further investigation it was discovered that a company that was licensed to have portable nuclear gauges had replaced some damaged and worn gauge cases to maintain strict shipping requirements. They had neglected to remove the radioactive labels prior to disposal. On Thursday, April 26,

another box of medical waste was returned to another Maine hospital. The shipment was returned from a medical waste company in Massachusetts after the box set off their radiation monitoring alarm. The survey, analysis and inves-

tigation determined the source of the radioactivity was a drinking cup that was used by a patient to take a dose of a radioactive isotope (Iodine 131) for a nuclear medicine scan. After use the cup was incorrectly disposed of as regular medical waste. Upon detection the contaminated cup was placed in the hospitals radioactive waste storage.

On Friday, April 27, an industrial radiography facility in Maine could only partially retract a radioactive sealed source (Iridium 192) back into the shielded camera body. After consultation with the camera's manufacturer and an inspection of the camera it was discovered that the control device gears were dirty. After cleaning the gears, the source was completely retracted to its shielded position.

NRC IS FORGING NEW RULES TO COVER PARTIAL RELEASE OF POWER PLANT LAND

The Nuclear Regulatory Commission (NRC) is being forced to consider a new twist to its nuclear power plant site-release regulations, NRC staff told the Advisory Committee on Nuclear Waste (ACNW) in March 2001.

The commission is forging standards for unrestricted release of a portion of the land included in a site's license, either while the plant is still operating or while it is decommissioning.

The rule revision was spurred by Oyster Creek's requested amendment to its technical specifications that included unrestricted release of a portion of the land in the license.

In reviewing the Oyster Creek request, the NRC staff realized

it was not clear if 10 CFR 20, Subpart E, applied if a licensee was not seeking to terminate it license.

It was also not clear whether a licensee needed NRC approval under current regulations to release a parcel of land while retaining the license to the plant.

In April 2000, the commissioners approved a staff rulemaking plan that called for a proposed rule to be published in 2001 and a final rule in 2002.

The proposed rule focuses solely on the unrestricted release of a portion of nuclear power plant sites, either during regular operation or decommissioning. It is similar to phased decommissioning for nuclear materials sites.

Procedural guidance for partial site releases will be in the form of a new section (10 CFR 50.83) of

NRC's regulation.

At least four power plants already have requested detailed information on the requirements for partial site release. Maine Yankee wants to donate about 200 acres of its land for a wildlife preserve.

Assessments will be completed on the power plants by reviewing records and interviews. Areas will then be classified as 'impacted or non-impacted areas'.

The definition of an 'impacted area' is an area with some potential for residual radioactivity.

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LLW WASTE BILLS INTRODUCED IN TEXAS

Several bills have been introduced in Texas this legislative session which pertain to the managernent and disposal of low-level radioactive waste. The following is a brief summary of major points of the legislation, as introduced. This summary is in no way intended to be a comprehensive analysis of the legislation. Persons interested in more detail are directed to the bills themselves. Copies of the bills, as well as status reports, can be found at www.capitol.state.tx.us

House Bill No. 8

This bill, among other things, provides for the possibility of construction of an assured

isolation facility in the State of Texas. In addition, it provides for the issuance of a license for a disposal or assured isolation facility to a private entity. However, the till contains the following language limiting waste disposal by the U.S. Department of Energy in a private facility:

"The total radioactivity of United States Department of Energy wastes licensed for disposal at a site owned by a private entity shall be twenty percent less than the radioactivity of wastes projected to be received pursuant to the Texas Low-Level Radioactive Waste Disposal Compact, unless the radioactivity is otherwise exempt or existing in nature."

H.B. 8 also contains language that limits the state's liability for waste that is accepted or stored at a site owned or operated by a private entity and that requires reporting of the disposal of low-level radioactive waste. In addition, the bill contains siting criteria, including the prohibition of a site within 62 miles of the Mexican border or in which the average annual rainfall is greater than 26 inches.

House Bill No. 85

This bill amends various sections of the Texas Health and Safety Code to remove the designation of Hudspeth County as the host county for the proposed Texas Compact low-level radioactive waste disposal facility. H.B. 85 was scheduled for a second reading in the Texas House of Representatives on April 10, 2001.

House Bill No. 1099

H.B. 1099 requires that radioactive material I-censees demonstrate that they are financially qualified to conduct the licensed activity, including the performance of decontamination, decommissioning, reclamation and disposal activities. The bill also provides for the collection of an additional five percent of the appropriate annual fee to be deposited in the radiation and perpetual care fund.

House Bill No. 2370

H.B. 2370 prohibits the disposal of low-level radioactive waste in a landfill "below the natural level of a disposal site."

House Bill 2371

This piece of legislation contains a requirement that a host state commissioner and an alternate must sign and present to the governor prior to his appointment a written pledge not to allow for the disposal of waste from states outside of the Texas Compact in a facility licensed by the state.

House Bill 2904

H.B 2904 removes the designation of Hudspeth County as the host for a regional low-level radio-active waste disposal facility. In addition, the bill requires that a disposal site "include above-ground isolation facilities for managing low-level radioactive waste pending disposal."

House Bill 2905

This bill establishes a Low-Level Radioactive Waste Disposal Authority as a state agency charged with statewide jurisdiction over low-level radioactive waste management and disposal and creates a citizens advisory committee to perform oversight functions. It contains detailed requirements about the selection of Authority members, their powers and duties, and management site selection and acquisition. The bill also establishes a preference for above-ground, monitored storage of low-level radioactive waste. It also requires approval of the host county prior to the siting of a facility.

"A management site may not be licensed by the Texas Natural Resource Conservation Commission unless the voters of the county in which the site is proposed to be located have approved of the location of the site at a referendum election called and held for that purpose."

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The bill states that the Authority shall apply to the Texas Natural Resource Conservation Commission for a site license, but specifically states that the Commission may not license the management of mixed waste. Also, a license may not be issued for below-ground disposal or shallow land burial of low-level radioactive waste. The Texas Department of Health has jurisdiction, according to the bill, over low-level radioactive waste storage activities other than assured isolation and over waste transportation to or from a management site.

House Bill No. 3086

H.B. 3086 removes the designation of Hudspeth County as the host for a regional low-level radio-active waste disposal facility. It also lays out the process for selecting a site, including a county election on whether the Texas Natural Resource Conservation Commission should be authorized to choose the site for further analysis.

House Bill No. 3283

H.B. 3283 provides for the siting of either a low-level radioactive waste assured isolation facility or disposal facility. However, if the state chooses to develop an assured isolation facility, it must conduct certain studies and meet certain specified requirements listed in the bill. In addition, the legislation prohibits the siting of a facility in a county that is adjacent to an international boundary, within 62 miles of an international boundary, and in a location that receives greater than 26 inches of rain. The bill provides for a county referendum on the siting of a facility and requires an affirmative response from a majority of those voting. In regard to below-ground burial, the bill states as follows:

"Underground disposal may be considered for the management of lo w-level radioactive waste

received from the compact states only if assured isolation is found not to be feasible."

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